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EXAMINER

PEREZ GUTIERREZ, RAFAEL

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 33

Application Number: 09/158,938
Filing Date: September 22, 1998
Appellant(s): Karmi et al.

Sandra L. Godsey
For Appellant

EXAMINER'S ANSWER

This is in response to Appellant's brief on appeal filed January 9, 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

Art Unit: 2683

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The Appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on November 13, 2002 has not been entered. An Advisory Action stating the reasons for not entering the amendment after final rejection was mailed to the Appellant on November 26, 2002.

(5) *Summary of Invention*

The summary of invention contained in the brief is deficient because it does not refers to the specification by page and line number and to drawing by reference characters (37 CFR 1.192(c)(5)).

The following is a summary of the invention written by the Examiner.

The system and method of the present invention provide a simple, but effective technique for communicating overhead messages in a wireless communication system providing access to a decentralized network, while achieving bandwidth savings as well as minimizing power consumption. In one embodiment, a wireless base station which is

Art Unit: 2683

connected to a decentralized network transmits a sequence of signatures for overhead messages to a mobile unit. The mobile unit wakes up, receives the signatures and compares them to signatures stored at the mobile unit. If the signatures received by the mobile unit are different from the signatures stored at the mobile unit, the mobile unit stays awake to receive the overhead messages to be transmitted by the wireless base station. If the signatures received by the mobile unit are the same as the signatures stored at the mobile unit, the mobile unit may go back to sleep. (page 7 lines 2-13 of the specification).

In an alternative embodiment, the mobile unit wakes up and receives a message from a wireless base station. The mobile unit generates a signature using the message. The mobile unit compares the signature to the signature of a previous message received by the mobile unit. If the signature generated for the message received is the same as the signature of the previous message received, then the mobile unit goes back to sleep. If the signature generated for the message received is different from the signature of the previous message received, then the mobile unit updates operating parameters used for communicating with the base station (page 7 lines 14-22 of the specification).

(6) *Issues*

The Appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Art Unit: 2683

The Appellant's statement of the grouping of claims in the brief is correct.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix A to the brief is correct.

The copy of the claims contained in the Appendix B is irrelevant to the present appeal because the claims are based on the amendment after final rejection filed on November 13, 2002 which has not been entered.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,392,287	TIEDEMANN, JR. ET AL.	2-1995
5,396,537	SCHWENDEMAN	3-1995

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-124 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Art Unit: 2683

Consider **claims 1-124**, the concept of signature has not been clearly defined in the present application in such a way as to reasonably convey to one skilled in the relevant art how to make and use the present invention. Since the signature is supposed to be different than a sequence number, according to Applicant's arguments filed on November 29, 2001, the present application must clearly disclose what a signature is, and how such signature is different from a sequence number. Just because a sequence number is disclosed as been used in communication systems with centralized control and the signature is disclosed as been used in communication systems accessing decentralized network does not mean that 37 CFR 1.71 is met as Applicant argues and that one skilled in the relevant art would understand what the signature is, per se. Because the disclosure of the present application lacks such definition and differentiation, the present application is left open to interpretation of the term signature to be equivalent to sequence number since the present application also lacks of a proper disclosure providing a clear differentiation between signature and sequence number.

If Applicant considers the signature and the use of the signature to be the novel invention in the present application in view of the prior art (e.g., the sequence number and the use of sequence numbers) then the concept of signature should have been clearly defined in the disclosure of the present application.

Note to Applicant: For purposes of applying prior art and in view of the above remarks in the 112 first paragraph rejection, the term signature has been examined understood as being

Art Unit: 2683

equivalent to sequence number.

Claims 1-43, 48-58, 62, 63, 65-81, and 86-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tiedemann, Jr. et al. (U.S. Patent # 5,392,287)** in view of **Schwendeman (U.S. Patent # 5,396,537)**.

Consider **claims 1, 2, 14, 57, 63, and 65**, Tiedemann, Jr. et al. clearly disclose a method for reducing power consumption in a mobile communications receiver in which a receiver (mobile station) receives a sequence of messages, each respective message containing a respective sequence number (signature) generated by a transmitter 10 in a base station (figure 1), and wherein the receiver compares the respective sequence number (signature) of any message with at least one sequence number (signature) (column 8 lines 54-64).

However, Tiedemann, Jr. et al. fail to disclose that the respective sequence number (signature) is separate from the respective message.

Schwendeman clearly discloses a reliable message delivery system utilizing a paging transmitter system in which a message 200, which includes a message capsule 204, that is transmitted to one or more remote units 130 (mobile stations) includes a respective sequence number 208 (signature) (i.e., signature capsule) that is not included in the message 200 (i.e., is separate from the respective message) for purposes of reducing transmission overhead in the paging communication channel 122 (figures 1 and 2 and column 16 lines 38-43).

Therefore, it would have been obvious to a person of ordinary skill in the art at the

Art Unit: 2683

time the invention was made to slightly modify the teachings of Tiedemann, Jr. et al. with the teachings of Schwendeman in order to provide an overhead messaging method and system in a wireless communication system in which considerable power can be saved at a mobile station when sequence numbers associated with respective overhead messages are provided separately, thereby allowing a receiving mobile station to be capable of determining if it is necessary to received the overhead message associated with a respective sequence number just by comparing the respective sequence number with a previously received sequence number without the need to go throughout the whole process of receiving the overhead message, consequently, conserving power.

Consider **claims 3, 4, 6, 66, and 67**, and as **applied to claims 1, 2, and 65 above**, Tiedemann, Jr. et al., as modified by Schwendeman, also disclose that the receiver enters an inactive state (sleeps) if a respective sequence number (signature) received matches a corresponding sequence number (signature) from the at least one sequence number (signature) (column 1 line 63 - column 2 line 4 and column 9 lines 16-20).

Consider **claims 5 and 7**, and as **applied to claims 1-4 and 6 above**, Tiedemann, Jr. et al., as modified by Schwendeman, further disclose that the respective message is transmitted during each successive occurrence of the active state (during the inactive state (sleeping)) (column 1 lines 53-60).

Consider **claims 8, 9, 13, 15, 16, 62, 68, and 69**, and as **applied to claims 1, 2, and 65 above**, Tiedemann, Jr. et al., as modified by Schwendeman, also disclose that the receiver

Art Unit: 2683

remains in the active state and wait (listen) for a respective message, until the respective message is received, if a respective sequence number (signature) received does not match a corresponding sequence number (signature) from the at least one sequence number (signature) (column 9 lines 10-16).

Consider **claims 10-12, 17-22, 28-30, 33-37, 70-72, and 77**, and as applied to **claims 8, 9, 13, 15, 16, 68 and 69 above**, although not specifically disclose by the combined teachings Tiedemann, Jr. et al. and Schwendeman, it is inherently taught that the receiver enters the inactive state (sleeps) after the respective message is received (after listening stops, column 9 lines 16-20) and reenters the active state (wake up) after a predetermined time (e.g., 5.2 seconds) since the time range of the slot cycles disclosed by Tiedemann, Jr. et al. is between 2 and 128 seconds (column 4 lines 4-7).

Consider **claims 23, 24, 31, 32, and 39-42**, and as applied to **claims 10-12, 17-22, and 28-30 above**, Tiedemann, Jr. et al., as modified by Schwendeman, further disclose that the receiver (mobile station) receives a sequence of messages, each respective message containing a respective sequence number (signature), from a cellular telephone system (wireless communication system) (abstract and column 1 line 53 - column 2 line 5).

Consider **claims 25-27 and 73-76**, and as applied to **claims 10-12, 17-22, 28-30, and 68 above**, Tiedemann, Jr. et al., as modified by Schwendeman, does not specifically disclose listening for a first, second, and third respective message, wherein listening for the third respective message is done after listening for the second respective message, wherein said

Art Unit: 2683

listening for the second respective message is done after listening for the first respective message.

However, Tiedemann, Jr. et al. does provide a clear teaching that would suggest to a person of ordinary skill in the art that the listening steps of a first, second, and third respective message, as claimed by the Applicant, can be done since Tiedemann, Jr et al. clearly disclose that the respective sequence numbers (signature) of respective messages received at the mobile station are compared with corresponding sequences numbers (signatures) previously stored and if the respective sequence number (signature) of a respective message has changed, the mobile station listens to said respective message (column 8 line 54 - column 9 line 20).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify the combined teachings of Tiedemann, Jr. et al. and Schwendeman in order to listen to a respective message having a respective sequence number (signature) that does not match a corresponding sequence number (signature) previously stored and, therefore, saving battery power since only a different message not previously received would be decoded.

Consider **claims 38, 53-56, 78, and 91-94**, and as applied to **claims 1, 42, and 65 above**, Tiedemann, Jr. et al., as modified by Schwendeman, further disclose that the sequence of messages are overhead information (i.e., overhead messages, e.g. base station parameters, channel list, access parameters) (column 9 lines 14-16).

Consider **claims 43, 48, 49, 58, 81, 86, and 87**, and as applied to **claims 1 and 65**

Art Unit: 2683

above, Tiedemann, Jr. et al., as modified by Schwendeman, further disclose the use of a hash function when assigning slot numbers (column 2 lines 48-52), therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify the combined teachings of Tiedemann, Jr. et al. and Schwendeman in order to use a hashing function when providing sequence numbers (signatures) of sixteen or thirty-two bit value to messages.

Consider **claims 50-52, 88-90, and 118-120**, and as applied to **claims 1 and 65** above, although Tiedemann, Jr. et al., as modified by Schwendeman, does not disclose the use of counter when giving a sequence number (signature) to a message, the Examiner takes Official Notice that is notoriously well known in the art to use counters when assigning sequence numbers (signatures) to particular sequences of messages.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify the combined teachings of Tiedemann, Jr. et al. and Schwendeman with well known teachings in the art in order to provide sequence numbers (signatures) to messages using values that are taken from a counter.

Claims 79 and 80 are similarly rejected for the same reasons explained in detail above for **claims 1, 39, 40, and 78**.

(11) *New Ground(s) of Rejection*

This Examiner's Answer does not contain New Ground(s) of Rejection.

Art Unit: 2683

(12) Response to Argument

A response to the arguments concerning the rejections of claims 1-124 follows.

a) Response to Arguments in Support of Issue 1

In the present application, Appellant argues, on page 5 third paragraph of the brief, that “the PTO has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims” and that “[T]he Examiner has not provided such evidence or reasons”.

The Examiner respectfully disagrees with Appellant’s argument because during a telephone interview conducted on February 14, 2001 with Mr. Pavel Kalousek the issue of the concept of signature not being clearly defined in the present application was thoroughly discussed and, moreover, the Examiner and Mr. Kalousek agreed during said interview that the interpretation given to the term signature by the Examiner (i.e., the signature being equivalent to the sequence number) was proper and in accordance with page 14 lines 4-6 of the specification which states that “[I]n many instances, the mobile unit will go back to sleep after receiving the signature because **the signature is the same as the sequence number** received the last time the mobile unit woke up” (**Emphasis added**). See the Interview Summary dated February 14, 2001 (mailed February 23, 2001), Paper No. 13.

Consequently, in view of the above reasons, it is clear that the evidence, being argued by the Appellant as not being provided, has been presented, discussed, and agreed upon before

Art Unit: 2683

by the Examiner and the Appellant.

In addition, Appellant further argues, on page 6 of the brief, that “the specification clearly illustrates a signature (see FIG. 2) and details a method of generating a signature that does not use a sequence number (p. 14, ll. 14-30, use of a hashing function)”.

However, the Examiner respectfully disagrees with Appellant’s argument because page 14 lines 14-30 of the present application only recites how a signature can be generated, it does not explain how a signature is different from a sequence number as Appellant argues. Just because a signature is disclosed as been generated in a certain way does not mean that one skilled in the relevant art would understand what the signature is or how it is different from a sequence number.

Finally, in response to Appellant’s arguments, on pages 7 and 8 of the brief, that the signature, as opposed to a sequence number, is employed in decentralized networks, the recitation of “decentralized network” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the present application, the body of the independent claims does not link the use of

Art Unit: 2683

signatures to decentralized networks.

b) Response to Arguments in Support of Issue II

In the present application, Appellant basically argues, on page 9 last two paragraphs of the brief, that the Examiner has failed to establish a prima facie case of obviousness because Schwendeman recites, in column 7 lines 17-63, that the transmitted message 200 also includes the message sequence number 208.

The Examiner respectfully disagrees with Appellant's argument because it is focusing on an embodiment of Schwendeman's invention that is not the one relied upon by the Examiner for the rejection.

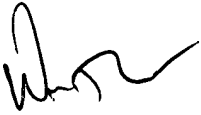
Schwendeman clearly discloses, on column 16 lines 38-43, an embodiment in which a reliable message delivery system utilizes a paging transmitter system in which a message 200, which includes a message capsule 204, that is transmitted to one or more remote units 130 includes a respective sequence number 208 (signature) (i.e., signature capsule) that **is not** included in the message 200 (i.e., is separate from the respective message) for purposes of reducing transmission overhead in the paging communication channel 122.

It is clear from the above embodiment in Schwendeman's invention that the sequence number is separated from the message, consequently, it is considered that the Examiner has established a clear prima facie case of obviousness.

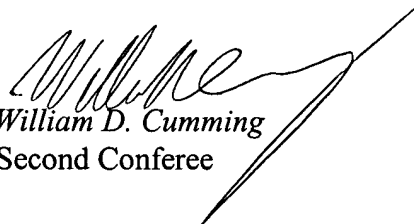
Therefore, in view of the above reasons and having addressed each of Appellant's

Art Unit: 2683

arguments, it is believed that the rejection should be sustained.



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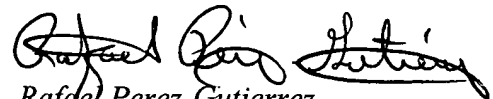
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